

**To:** Gundersen, Jennifer[Gundersen.Jennifer@epa.gov]; Caporale, Cynthia[Caporale.Cynthia@epa.gov]; Graybill, Eric[graybill.eric@epa.gov]; Molnar, Adam[Molnar.Adam@epa.gov]; Poff, Kevin[Poff.Kevin@epa.gov]; Zawodny, Peggy[Zawodny.Peggy@epa.gov]; Slayton, Joe[Slayton.Joe@epa.gov]  
**From:** Warner, Sue  
**Sent:** Wed 1/29/2014 7:23:02 PM  
**Subject:** RE: Revision 1 to the EPA Hotsite Report - WV Chemical Leak - 1/29/14

Most of the methods are derivitization. There is a method using titration using a Hanna test kit: [http://www.ebay.com/itm/Hanna-Instruments-HI3838-Formaldehyde-test-kit-110-tests-/201017134555?\\_trksid=p2054897.l4275#ht\\_1188wt\\_1124](http://www.ebay.com/itm/Hanna-Instruments-HI3838-Formaldehyde-test-kit-110-tests-/201017134555?_trksid=p2054897.l4275#ht_1188wt_1124). The Hanna Instruments HI 3838 Formaldehyde Portable Test Kit makes monitoring easy, quick and safe. Formaldehyde concentration is determined by a simple acid titration. The formaldehyde, in the aqueous sample, reacts with sodium sulfite to form an alkaline product. This product is then titrated to a yellow alizarin R yellow endpoint, using a prestandardized hydrochloric acid solution.

There is a method in Standard Methods, Method 6252B, which uses a PFBHA (pentafluorobenzyl hydroxylamine hydrochloride) derivitization, followed by GC analysis.

There is also an air method TO-11A.

**From:** Gundersen, Jennifer  
**Sent:** Wednesday, January 29, 2014 2:12 PM  
**To:** Caporale, Cynthia; Graybill, Eric; Molnar, Adam; Poff, Kevin; Warner, Sue; Zawodny, Peggy  
**Subject:** RE: Revision 1 to the EPA Hotsite Report - WV Chemical Leak - 1/29/14

Is there an attachment? Or just the link to the article?

Can we find out what method they used?

The 2 methods Sue W and I found both involve derivatization: SW 846 8315 is a hplc/uv and the sample is derivatized with dinitrophenylhydrazine

Method 556.1 is a gc/ecd method- also with derivatization

Given its MW of 30, I am not sure I would see it on the LC/MS

**From:** Caporale, Cynthia

**Sent:** Wednesday, January 29, 2014 1:16 PM

**To:** Graybill, Eric; Gundersen, Jennifer; Molnar, Adam; Poff, Kevin; Warner, Sue; Zawodny, Peggy

**Subject:** FW: Revision 1 to the EPA Hotsite Report - WV Chemical Leak - 1/29/14

**Ex. 5 - Deliberative**

See below for new news.

**From:** Kelly, Jack (R3 Phila.)

**Sent:** Wednesday, January 29, 2014 12:44 PM

**To:** Arguto, William; Wisniewski, Patti-Kay; Werner, Lora; Markiewicz, Karl; Helverson, Robert; Adam Hamrick ([hamrick.adam@dol.gov](mailto:hamrick.adam@dol.gov)); Smith, Art; Gilbert, John; Caporale, Cynthia

**Subject:** FW: Revision 1 to the EPA Hotsite Report - WV Chemical Leak - 1/29/14

Oy vey....

Jack Kelly

On Scene Coordinator

EPA Region III, Philadelphia

215-514-6792 (cell)

215-814-3112 (office)

**From:** Linden, melissa

**Sent:** Wednesday, January 29, 2014 12:21 PM

**To:** Matlock, Dennis; Burns, Francis  
**Cc:** Kelly, Jack (R3 Phila.); Jarvela, Steve; Casillas, Laura  
**Subject:** Re: Revision 1 to the EPA Hotsite Report - WV Chemical Leak - 1/29/14

<http://www.wvgazette.com/News/201401290053>

Formaldehyde now in water samples and seems they are trying to tie to this incident.

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**From:** Matlock, Dennis  
**Sent:** Wednesday, January 29, 2014 12:15:44 PM  
**To:** Burns, Francis  
**Cc:** Linden, melissa; Kelly, Jack (R3 Phila.); Jarvela, Steve; Casillas, Laura  
**Subject:** FW: Revision 1 to the EPA Hotsite Report - WV Chemical Leak - 1/29/14

fyi

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**From:** [Ex. 5 - Deliberative]@TechLawInc.com>  
**Sent:** Wednesday, January 29, 2014 12:08 PM  
**To:** Matlock, Dennis; Linden, melissa  
**Cc:** [Ex. 5 - Deliberative]  
**Subject:** Revision 1 to the EPA Hotsite Report - WV Chemical Leak - 1/29/14

Dennis,

Here is the revised hotsite report.

Thanks,

[Ex. 5 - Deliberative]

TechLaw, Inc.

2208 Warwood Ave

Wheeling, WV 26003

[Ex. 5 - Deliberative] 2 (office)

Ex. 5 - Deliberative (cell)  
(fax)